Written Amendment

(Amendment based on Section 11)

To Ms. Ryoko MORIGUCHI, Examiner at the Patent Office

1. Identification of the International Application

PCT/JP2005/007682

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4. Object of Amendment:

Claims

5. Contents of Amendment

(1) We amend "a colored layer ..., and the retroreflected light" in lines 8 and 9 in claim 1 (translation: lines 14 to 16), into --a colored layer ..., a total visible light transmittance of the optical coherent layer is higher than a

total visible light transmittance of the colored layer, and the retroreflected light --.

(2) We cancel claim 4.

(3) According to the cancellation of claim 4, we amend the number of dependent claims 5 to 19.

6. List of appended document

(1) New pages 29 to 31(translation: pages 42 to 47) of claims one

CLAIMS

[1] (Amended) A hue variable retroreflective sheet comprising: a surface layer composed of at least one layer; and a plurality of retroreflective elements that are positioned beneath the surface layer, wherein

the retroreflective element retroreflects incident light toward a light source direction,

at least one layer of the surface layer is an optical coherent layer that changes in color depending on a point of view and in which an optical coherent coloring material with a core material having a surface that is covered with one or more substantially transparent coating layer is added to be dispersed, and mirror-reflects the incident light toward a direction opposite to the light source side,

at least one layer of the retroreflective sheet is a colored layer containing a coloring material that colors retroreflected light,

a total visible light transmittance of the optical coherent layer is higher than a total visible light transmittance of the colored layer, and

the retroreflected light and the mirror-reflected light provide different hues.

[2] The hue variable retroreflective sheet according to claim 1 that can be observed visually in diffused light, and provides hues in two or more different colors depending on a point of view.

[3] The hue variable retroreflective sheet according to claim 1 or 2, wherein

the optical coherent layer can be observed visually in the diffused light and provides hues in two or more different colors depending on a point of view, and

the colored layer is positioned beneath the optical coherent layer.

[4] (Cancelled)

[5] (Amended) The hue variable retroreflective sheet according to any one of claims 1 to 3, wherein the total visible light transmittance of the optical coherent layer is 30% or more.

[6] (Amended) The hue variable retroreflective sheet according to any one of claims 1 to 3 and 5, wherein the optical coherent coloring material is an optical coherent pigment comprising: a core material having a function that does not substantially transmit light and reflects the light; and a coating layer having a mirror-reflecting function on an interface between any of the layers.

[7] The hue variable retroreflective sheet according to claim 6, wherein

a coloring material is further contained, besides the optical coherent coloring material, in the optical coherent layer, and,

where a content of the coloring material is α and a content of the optical coherent coloring material is β,

α/β is 0.45 or less.

[8] (Amended) The hue variable retroreflective sheet according to any one of claims 1 to 3 and 5 to 7, wherein at least one color of hues that can be observed visually in the diffused light and the hue of the retroreflected light is an achromatic color.

[9] (Amended) The hue variable retroreflective sheet according to any one of claims 1 to 3 and 5 to 8, wherein at least one color of the hues that can be observed visually in the diffused light is substantially opposite hue to the hue of the retroreflected light.

[10] (Amended) The hue variable retroreflective sheet according to any one of claims 1 to 3 and 5 to 9 that is an enclosed lens type retroreflective sheet, wherein

the retroreflective elements are glass spheres having a refractive index of 2.10 or more,

the glass spheres are enclosed in a resin,

a focusing layer is formed on a rear surface of the glass sphere, and

a metal reflective layer is formed on a rear surface of the focusing layer.

[11] (Amended) The hue variable retroreflective sheet according to any one of claims 1 to 3 and 5 to 9, wherein

the retroreflective elements are glass spheres having a refractive index of 2.10 or more,

a focusing layer enclosing the glass spheres is formed,

a metal reflective layer is formed on a rear surface side of the focusing layer, and

the glass spheres are disposed at random positions in a thickness direction of the focusing layer.

[12] The hue variable retroreflective sheet according to claim 11, wherein

the glass spheres comprise: a glass sphere group B that is in contact with the surface layer; and a glass sphere group A that is positioned away from the surface layer, and

the glass sphere group A achieves a reflective performance in an observation angle that is larger than an observation angle of the glass sphere group B.

[13] The hue variable retroreflective sheet according to claim 11, wherein

the glass spheres comprise: a glass sphere group B that is in contact with the surface layer; and a glass sphere group A that is positioned away from the surface layer,

a metal reflective layer of the glass sphere group B is formed at a focus formation position,

a thickness of a focusing layer of the glass sphere group A is smaller than a thickness of a focusing layer of the glass sphere group B, and

the glass sphere group A achieves a retroreflective performance in an observation angle that is relatively larger than an observation angle of the glass sphere group B.

[14] The hue variable retroreflective sheet according to claim 11, wherein

the glass spheres comprise: a glass sphere group B that is in contact with the surface layer; and a glass sphere group A that is positioned away from the surface layer,

a focusing layer of the glass sphere group B that is formed on the glass sphere concentrically has a film thickness that achieves a maximum reflective performance at an observation angle of 0.2° and an incident angle of 5°,

a film thickness of a focusing layer of the glass sphere group A is smaller than the film thickness of the focusing layer of the glass sphere group B, and

the glass sphere group A achieves a retroreflective performance in an observation angle that is larger than an observation angle of the glass sphere group B.

[15] (Amended) The hue variable retroreflective sheet according to any one of claims 1 to <u>3 and 5 to</u> 9 that is an encapsulated lens type retroreflective sheet, wherein

the retroreflective elements are glass spheres having a refractive

index ranging between 1.80 and 2.00 inclusive,

a substantial lower hemisphere of the glass sphere that is covered with a metal reflective layer is held by the resin support sheet so as to be embedded in the resin support sheet, and

air is enclosed on a surface side of the glass spheres.

[16] (Amended) The hue variable retroreflective sheet according to any one of claims 1 to 3 and 5 to 9, wherein the retroreflective elements are a cube corner type.

[17] (Amended) The hue variable retroreflective sheet according to any one of claims 1 to 3 and 5 to 16 that is flexible and stretchable, and can be attached onto a three-dimensionally curved surface.

[18] The hue variable retroreflective sheet according to claim 17 that is not risen from an aluminum substrate, and does not cause imperfection such as a crack and a breakage,

when being attached to the aluminum substrate with a thickness of 1 mm that is set forth in a JISZ9117 7. testing method and being extruded in a depth of 5 mm with a spherical surface punch having a radius of 10 mm by using an Erichsen film strength tester that is set forth in JISB7729.

[19] (Amended) The hue variable retroreflective sheet according to any one of claims 1 to 3 and 5 to 9, wherein

the retroreflective elements are glass spheres having a refractive index of 2.10 or more and comprise: a glass sphere fixing layer; glass spheres and printing resin layer; a focusing layer; and a metal reflective layer in this order,

the printing resin layer forms a mark,

the glass spheres are disposed in the glass sphere fixing layer,

the glass spheres and the printing resin layer are disposed so as not to be positioned overlapping with each other when being observed from the surface layer in a thickness direction of the retroreflective sheet, and

the retroreflected light and the mirror-reflected light provide different hues.